
Port Stakeholder Working Group Minutes of Meeting

9am - 10:30am, Friday 30 September 2016
Port of Townsville Boardroom Meeting Room

Present

David Donohue
Melinda Loudon, Raneen Crosby, Sharon Hoops, Kim
Gebbers
Charlie McColl, Wendy Tubman
Lucy Ball
Clive Berger, Judy Newman (in part), Ian Ferguson,
Damien Farrington
David Zammit, Anne Williams
Chris Wake, Nina Henney
Juliette Sperber
Ken Dunlop
Don ?
Peta Connelly

Organisation

Chair (QCCN)
POTL

NQCC
South32
Community Reps
QLD Health
Glencore
DEHP
NSS
Sun Metals
DSITI
TBSH

Apologies

Graeme Neilsen
James Hobbs
David Wainwright
Gavin Hammond

South32
Community Rep
DSITI
TCC

1. Welcome, Introductions

Wendy Tubman from NQCC has re-joined the PSWG. Don ? is representing DSITI today for David Wainwright.

2. Minutes of Previous Meeting

Minutes were adopted with the box below to replace text in Section 5. – Dashboard Discussion.

- Anne from Glencore reminded the group that the intent of the Dashboard was to provide a point in time snapshot. This was to allow wind, air and shipping data to be viewed in the same place and all graphs were attached to Minutes of the PSWG meetings anyway and made publicly available on the port website. The Dashboard was never intended to report long term trends as these are covered in the Air Quality Bulletins.
- Sharon to add link to the Air Quality Bulletin on the front page of the Dashboard as well as a link to the Minutes of PSWG meetings.
- Melinda to arrange for Port graphs to be made available with the extended historical time frame for data (5 years) and these to be attached to the Minutes.

3. Special Business

NQCC newsletter article and Terms of Reference.

Link to the NQCC blog entry titled "Townsville Port still battling lead pollution" can be found here: <http://nqcc.org.au/2016/townsville-port-lead-pollution/>

- David Donohue opened by stating that the PSWG is based on trust and transparency and it's difficult for members to come to the table if those values are not upheld.
- David suggested that the PSWG members acknowledge that NQCC had published a piece (blog) entry that did not abide by the Terms of Reference that were agreed to by all members during 2015, and we "move on from here."
- Ian Ferguson submitted a letter (next page) and reiterated that he was particularly frustrated by NQCC's actions and that his constituents were confused by the conflicting information emanating out of the PSWG.
- Juliette Sperber added that she felt "the article was a slap in the face to everyone involved (in the PSWG) and that if all the members aren't here with genuine intent then there was no point in proceeding."
- David Donohue added that the blog piece claims that the port is the only source of lead in Townsville which is not accurate.
- Sharon Hoops added that she felt the first paragraph of the blog entry was deliberately written to scare people:

"New data coming from updated monitoring equipment at the Townsville waterfront appears to confirm long-held community concern about heavy metal pollution being carried in dust emanating from the state-owned Port of Townsville"

- Damien Farrington added that the increase in levels occurred two years ago, it's time to move on and use the data we have now.
- Raneë Crosby added "I asked to establish this group to address the issues at hand and this article takes us back two years to where we started. Port users now have a much better understanding of lead levels in the air thanks to the Xact Data at the Coastguard. From that data they are able to investigate the source (shiploaders, rail loaders, sources outside the port etc). and what can we do to continually improve our operations in line with that information."
- Clive Berger added that "port activity corresponds with increased lead pollution and nobody wants to acknowledge that." David Donohue reminded Clive that his correlation exercise only occurred in 7 out of the 9 ships he studied.
- Anne Williams added that the data needed to be viewed holistically (Xact, hi Vol etc) not individually as this does not provide an accurate picture of what's going on.
- David Donohue added that he felt NQCC should be viewing the whole exercise of the PSWG as a success story, rather than agitating in the public space. Noting NQCC's role in formation of PSWG as a public forum, moves by government to increase the frequency and availability monitoring data, the much better understanding of dust sources and impacts, the ongoing improvement works undertaken by port users, moves towards improved standards, and only last month a transparent public reporting system implemented. PSWG, including NQCC as a vital part, has made great strides in its short life.

Thank you for the opportunity today.

I feel I must make comment on behalf of my community in relation to a serious misjudgement by a certain participating party.

My constituents in the South Townsville and Railway Estate area are blindsided by what has turned out to be the promotion of misguided information.

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Then along comes a particular bulletin that slaps me and others in the face.

I do note that as of a few days ago the organisation in question has on its website **Minutes** available only dated to November 2015.

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How, therefore can you promote a clear and transparent understanding of the work being done if your information to your supporters and clientele is not up date.

I have taken numerous calls from my community with the question and I quote,

"Ferg, what is going on, what is correct".

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Ian Ferguson

Community Representative.

4. Port Update

- Community e-newsletter was distributed during September.
- POTL's Annual Report will be tabled in parliament today.
- The Port's annual Community Information Session is scheduled for 5.30pm on Thursday 26 October at Quayside Terminal. All PSWG members will receive a formal invitation.
- To crystallise achievements of the PSWG against objectives set in the Terms of Reference, the Port has drafted a document for review by the Group. This document lists the six objectives listed in the Terms of Reference, with achievements from the past 16 months attributed to the separate objectives. The purpose of this document is to assist the PSWG to evaluate not only how far it has come, but what is left to achieve prior to achieving set objectives.
- **Action: Members of the PSWG will receive an electronic of this document from Sharon Hoops and are asked to provide feedback by Friday 14 October at 5pm.**
- Similarly to the Objectives versus Achievements document, the Port tabled a suggestion that a ratified "Frequently Asked Questions" document would not only be beneficial to the PSWG meetings, but also for members of the public. The answers to these

questions can be drafted and discussed during the October meeting.

- Action: Sharon Hoops will distribute a starting list of questions via email, and PSWG members are asked to submit any additional questions by Friday 14 October.

5. PSWG Data Dashboard

- Sharon Hoops tabled the August 2016 version of the Dashboard noting that a link to the monthly Air Quality Bulletin had been added to the front page and the format had been amended to an interactive pdf document. This means the Dashboard is now much easier to access, easier to distribute (smaller file size), while retaining the same navigation functions.
- Sharon asked Chris Wake if the intention was to publish Xact Data in the quarterly Air Quality Bulletin in the future. Chris confirmed this was the intention however EHP are still going through the process of confirming data validation for Xact monitor.
- The Dashboard was accepted by the PSWG.
- Melinda Loudon is still working to produce the longer-term data graphs.
- Action: Sharon Hoops to amend the port image back to aerial photo and distribute Dashboard to media, community and post on social media.

6. DEHP Dashboard

- Chris Wake tabled the monthly EHP graphs which are produced for the use of the PSWG (now in Dropbox).
- Chris asked for confirmation from the group on requirements of graphs and formats and when do they want them.
- PSWG confirmed that the longer time frame graph is to be produced on a 6 monthly basis and the monthly graphs for submission at each PSWG.

7. Regulator Reports (by exception)

- TCC was an apology for the meeting.

8. General Business

- Mt Isa surface lead testing protocol – Damien Farrington tabled an email (see next page) to David Donohue that contains an explanation of the swipe testing (also called swabs) protocols. Damien provided context around the sampling that was conducted in Mt Isa as part of the Public Health Intervention – advising that the resulting data provided no consistent correlations between test results (from the swipes) and blood levels in children.

Wendy Tubman if Mt Isa had a standard for dust deposition? Chris Wake replied there was no standard. Anne Williams added that there was no standard in the Environmental Licence held by Glencore.

Chris Wake noted that the Xact machine in Townsville was located in what was classed as an industrial area and the monitor located in Mt Isa was monitoring ambient air quality.

David Donohue

From: Damien Farrington <Damien.Farrington@health.qld.gov.au>
Sent: Wednesday, August 31, 2016 2:28 PM
To: David Donohue
Subject: Dust sampling

Follow Up Flag: Follow up
Flag Status: Flagged

David

Just looked at the live data and Mount Isa lead 24hr av is 0.05 and Coast Guard is 0.014 – so Mount Isa higher.

For the Dust sampling procedure, Select area to be tested – window sill or other suitable flat surface, place template 100 mm x 100mm on surface, take Whatmans filter paper – moisten with deionised water, swab the area inside the template to collect dust. Place in sample bag and send to lab for analysis.

Detailed instructions are

Taking Swipe (also called swabs) Samples

Swipe samples are taken where the affected area only has a very thin layer of dust. If the area under investigation contains a significant quantity of dust (e.g. 0.5mm thick or more), collect a dust sample as described above rather than taking a swab sample.

Measure out a suitable sized geometric area where the swipe sample is to be taken. The measured area should be reasonably accurate as swipe results are usually reported as $\mu\text{g}/\text{swipe sample}$ which can then be related to $\mu\text{g}/\text{unit area}$ (e.g. micrograms of the element per square meter $\mu\text{g}/\text{m}^2$). In most cases, an area of 250mm x 250mm is suitable (this is $1/16^{\text{th}}$ of one square meter 1m^2). If the area is smaller than 250mm x 250mm (e.g. may be a round instrument dial with diameter 150mm), the sampler should note the approximate area for calculation of results to $\mu\text{g}/\text{m}^2$.

Use moistened 100mm Whatman filter paper (e.g. No 540) or other suitable ashless filter papers (e.g. 5A Advantec) for collecting the swab. To moisten the filter paper, dip the filter paper in high purity milliQ water and allow excess water to drain off. Fold into quarters and store in a 70mL screw cap urine jar (Sarstedt P/N: 75.9922.713) or other suitable clean container capable of being tightly sealed. Pre-moistened filters should be freshly prepared; storage life should not exceed about 2 weeks as the filter paper will tend to dry out. If pre-moistened filters are found to have dried out, discard these and prepare fresh ones. Filter papers may also be moistened in-situ at the testing site in the same manner described above (Note 1).

After measuring out the area to be investigated (usually 250mm x 250mm), take the moistened filter paper from the urine jar and unfold. Swab the affected area using only one side of the filter paper (Note 2).

Curl the swab up into a cylinder, or fold into quarters and place back into the 70mL urine jar. Label each of the containers and store in a cool dry place away from sunlight until ready to transport to the laboratory. (Note 3).

Results are reported in micrograms of element per swipe. If details of the geometric area which was investigated are supplied, the laboratory can present results as $\mu\text{g}/\text{m}^2$.

We choose 100 x 100 as opposed to 250 x 250 as things like window sills may not be 250 wide.

Damien Farrington
Manager Environmental Health
Townsville Public Health Unit
Townsville Hospital and Health Service | Queensland Government

- Clear Air Awards – Due to restrictive time frame for submissions for 2016 awards, the PSWG will be presented with the opportunity to consider a submission for 2017.
- Appointment of another community rep – David Donohue asked for comment (via email after this meeting) of the nomination form and criteria of the new youth PSWG representative.
- Independent Funding Options – Deferred until next meeting.

9. Meeting Close

The PSWG Meeting closed at 10:30am and the next meeting is to be held on Friday 28 October.

David Donohue, Chair

Date

NQCC Paperbark e-newsletter

September 2016

Toxic lead dust from Townsville Port

New data coming from updated monitoring equipment at the Townsville waterfront appears to confirm long-held community concern about heavy metal pollution from the Port of Townsville. The data demonstrates lead pollution higher than the allowable benchmark. NQCC's representative on the Port Stakeholders Working Group Charlie McColl has written an in-depth piece about the issue.

Guest post by Charlie McColl. Charlie is NQCC's representative on the Port Stakeholders Working Group.

New data coming from updated monitoring equipment at the Townsville waterfront appears to confirm long-held community concern about heavy metal pollution being carried in dust emanating from the state-owned Port of Townsville. As long ago as 2010 a Queensland Government report concluded that:

While compliance with EPP (Air) objectives was maintained at all times, the monitoring program identified that dust emissions from Townsville Port activities did contribute to ambient levels of Total Suspended Particles[TSP], lead, copper, zinc, arsenic and cadmium, and to lead deposition, at the closest monitoring site, Coast Guard. Measurable contributions of these pollutants from Townsville Port activities at monitoring sites located further from the Port were only observed for lead.

Queensland Health has concluded that the total exposure to lead from inhalation and ingestion of dust in the residential community areas near the Townsville Port is highly unlikely to be associated with any known adverse health effects.

A report commissioned by NQCC in 2014 from Professor Mark Taylor, an environmental scientist from Macquarie University, adopted a different approach, measuring heavy metal contamination on surfaces in play areas and parks downwind from the port. Amongst a string of conclusions, the Taylor report found that:

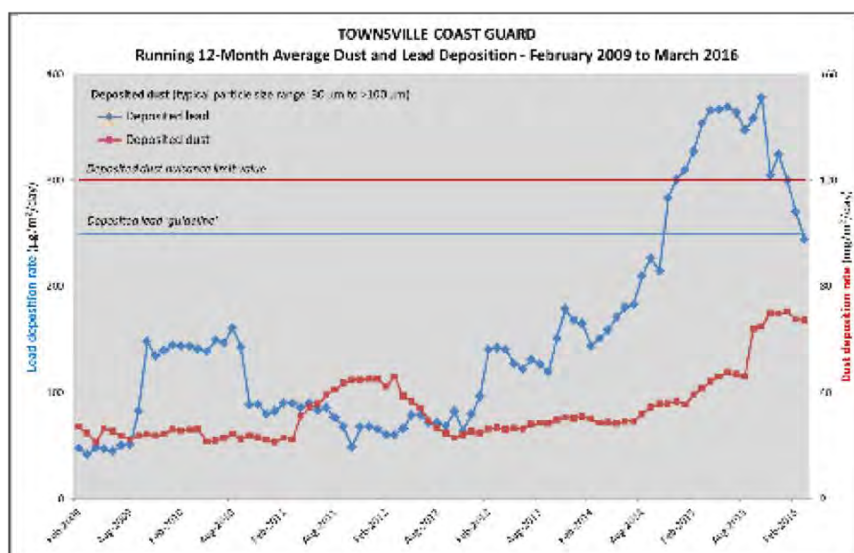
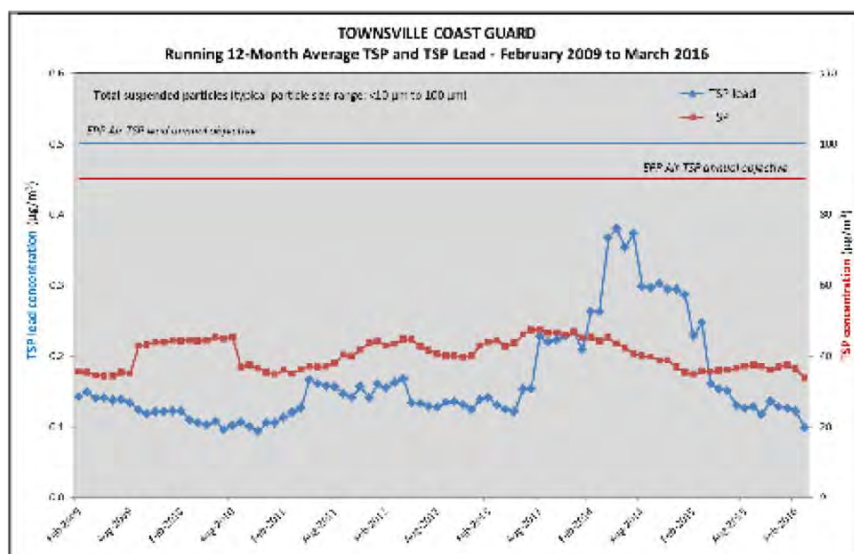
In terms of the surface dust metal loading measures collected on a daily basis from the six sites across inner Townsville, the data shows that lead and nickel are the elements that most commonly exceed relevant standards.

Whilst some in the industry were questioning aspects of the study, Professor Taylor's report was being peer-reviewed and has since been published in the journal *Science of the Total Environment* (515-516 (2015) 143-152). It now appears that what Taylor was saying two years ago has been validated by new data from the upgraded government measuring equipment installed at the Coastguard monitoring site adjacent to the port.

Under the auspices of the Port Stakeholders Working Group (PSWG, established by the Port of Townsville in early 2015 to bring together port users, relevant State departments, community members and NQCC) various aspects of port operations were brought together in an internet-accessible form – the [Port Operations Data Dashboard](#). It is now providing unparalleled access to live air quality readings from the XACT Monitor at the CoastGuard plus monthly data graphs from three suburban monitoring sites showing general total dust levels, lead in dust levels and general dust deposition levels. This new, incontrovertible data combined with shipping information (vessel type,

commodity, date, berth visited) and climatic data from the Bureau of Meteorology can now be compared in real time on the Dashboard to provide accurate assessment of what is happening at the Port. Data provided by the Department of Science, Information Technology and Innovation, which manages the XACT instrumentation, have been used by the industry regulator, the Department of Environment and Heritage Protection, to produce the graphical display below.

Townsville Coast Guard Station	Lead in TSP ($\mu\text{g}/\text{m}^3$)	Lead in Dust Deposition ($\mu\text{g}/\text{m}^2/\text{day}$)
Latest monthly value	0.02	75
Running 12 month average	0.10	244
% Lead in TSP / Deposited Dust	0.29%	0.36%



*There is no air quality objective for ambient lead deposition. Some data indicate that lead fallout levels between 250 and 750 $\mu\text{g}/\text{m}^2/\text{day}$ (averaged over a 12-month period) are associated with a slight increase in blood lead levels (Air Quality Guidelines for Europe, Second Edition, World Health Organization, 2000).

This document has been prepared with all due diligence and care, based on the best available information at the time of publication. The department holds no responsibility for any errors or omissions within this document. Any decisions made by other parties based on this document are solely the responsibility of those parties. Information contained in this document is from a number of sources and, as such, does not necessarily represent government or departmental policy.

[here to open the graph in a new window.](#)

[Click](#)

This historical perspective shows that major changes in lead-in-dust pollution have been occurring over the past seven years and were particularly evident (if only we had known!) at the time of the Taylor report in 2014. The first graph refers to lead and dust in air (particles per cubic metre) and the second refers to lead and dust deposition on surfaces (micrograms per square metre). As can be seen from the second graph, lead deposition levels rose alarmingly between August 2012 and August 2015, exceeding the vaguely written guidelines of the era. The Port of Townsville has been unable to explain what was going on over that period, let alone explain the sudden drop in lead emissions around the end of 2015. And, of course, if they cannot be explained, there is no way of ensuring that they won't happen again.

Residents are left with the question: what has happened to all the lead laid down and accumulated on surfaces (playgrounds, school yards, residential and commercial premises close to the Strand) during those years of high-level deposition?

Other questions arise from a more minute examination of the graphs. The "Running 12-month Average" format tends to smooth out any daily or hourly 'spikes' in dust that are to be expected when a ship is being loaded or unloaded. Are port 'lead-loading-days', when there are strong winds, times when children should be kept indoors or away from the port area? Why is it that over a three year period (2012-15), while deposited dust was increasing gradually, deposited lead was increasing steeply? Has the composition of dust changed? Why is it that the peak of 'total suspended particles' of lead (lead in air) was around the middle of 2014 (top graph) while the peak of 'deposited' lead (lead on surfaces) was around a year later (bottom graph)? Are there changes in the nature of the concentrates being handled, are there new technologies being employed, are there old failings being overlooked?

The Port Stakeholders Working Group has focused to a large extent on the development and implementation of industry-accepted data collection to be used by the regulator. We now need to look further afield. Whilst we accept that the various miners, refiners and materials handlers operating in the Townsville Port are compliant with government regulations we need to keep in mind that the Port of Townsville Ltd is not subject to those regulations.

The dust and other pollutants being deposited on the suburbs of Townsville and possibly registering as lead-in-blood in some Townsville children, is coming from the Port of Townsville itself and the focus of our efforts should be on reducing, as much as possible, these fugitive emissions. We should be considering whether assessment and remediation methods used in other metals-polluted sites (Mt Isa Q, Broken Hill NSW, Port Pirie SA, Esperance WA) should be brought to bear in Townsville where thousands of under-5s live in close proximity to the port. As Mark Taylor noted in his 2015 study:

While dust metal contaminant loadings [in Townsville] are lower than other mining and smelting towns in Australia, they exceeded national and international benchmarks for environmental quality. The lessons from this study are clear— even where operations are considered acceptable by managing authorities, targeted assessment and monitoring can be used to evaluate whether current management practices are truly best practice. Reassessment can identify opportunities for improvement and maximum environmental and human health protection.

Now that, thanks to the PSWG, we have the technology onsite and information available 24/7 on the internet, we should all pay attention and familiarise ourselves with the issue of pollution associated with Port activities.

In the meantime, the PSWG has further work ahead of it to interpret the new data and use that understanding to ensure continual improvement in order to protect the community of Townsville and its visitors, especially in and around the popular Strand.

PORT MEETING 30/09/2016

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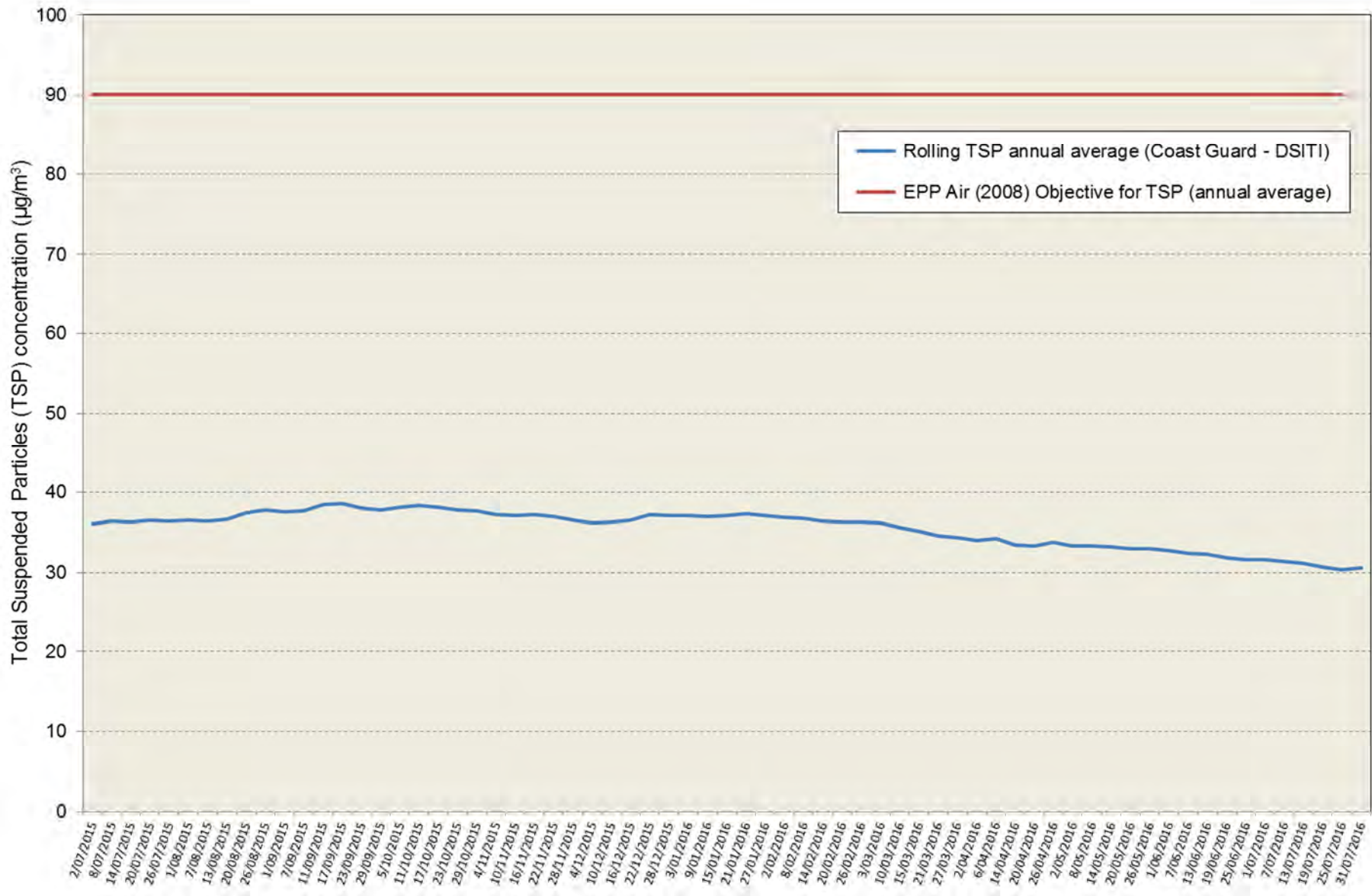
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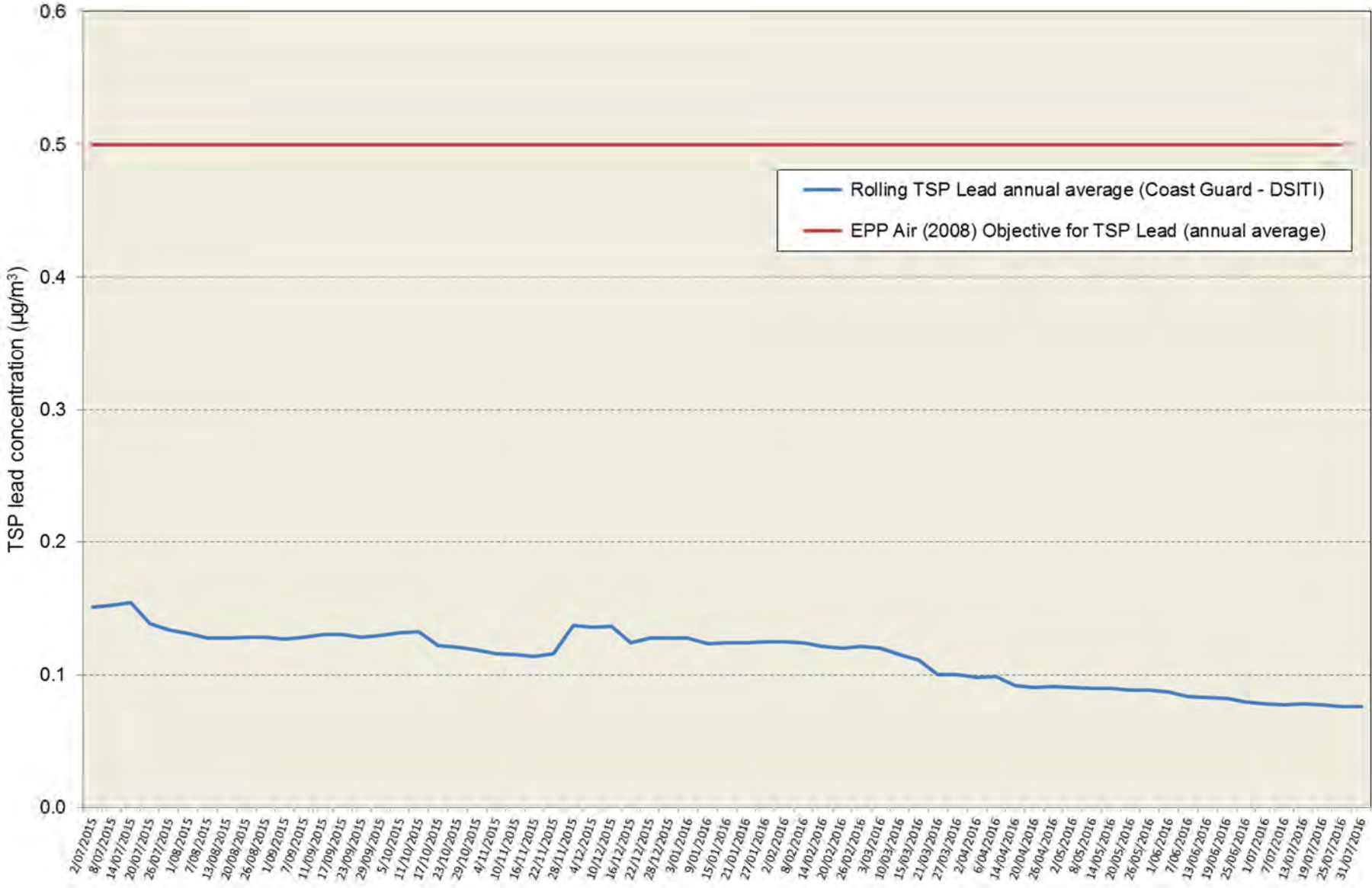
Damien Farrington

Manager Environmental Health
Townsville Public Health Unit
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242 Walker Street Townsville Qld 4810

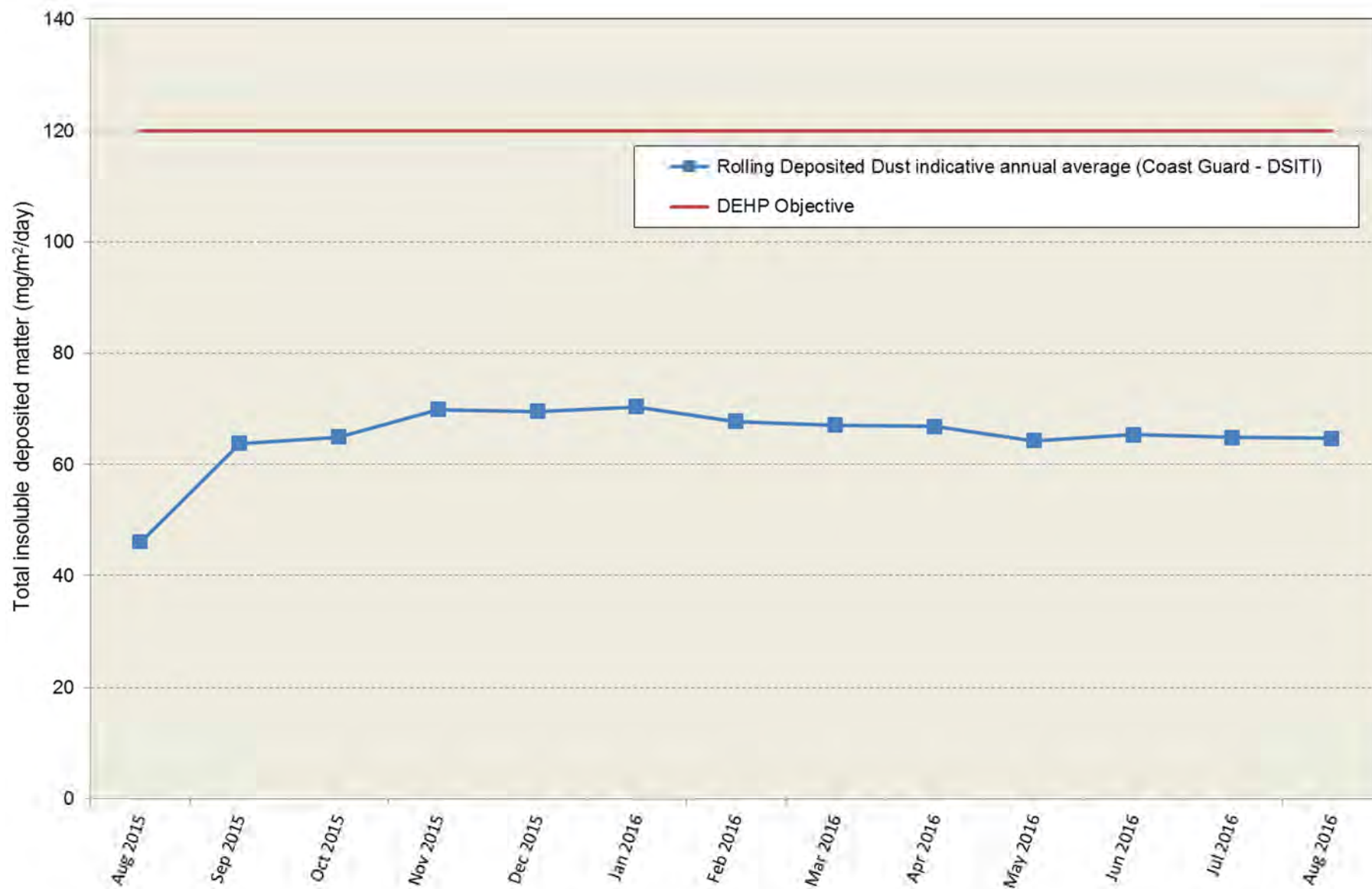
DSITI Total Suspended Particles (TSP) levels (one in six day sampling) at the Townsville Coast Guard Site for the last 13 months (July 2015 to July 2016)



DSITI Lead in TSP levels (one in six day sampling) at the Townsville Coast Guard Site for the last 13 months (July 2015 to July 2016)



DSITI Deposited Dust levels (monthly sampling) at the Townsville Coast Guard Site for the last 13 months (August 2015 to August 2016)



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